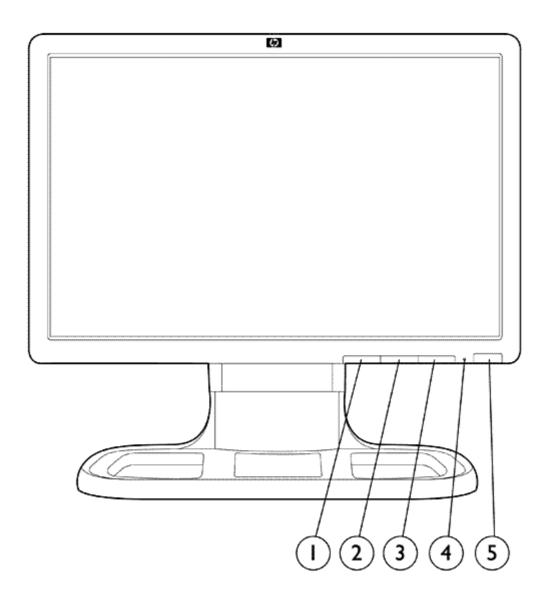
Overview



- 1. Menu/select: Opens, selects or exits the OSD menu.
- 2. "-"/Auto: Navigates backward through the OSD menu and decreases adjustment levels; when the OSD menu is inactive, activates the auto adjustment feature to optimize the screen image.
- 3. "+": Navigates forward through the OSD menu and increases adjustment levels.
- **4.** Power LED: fully powered = green; sleep mode = amber; sleep timer mode = flashing amber.
- 5. Power: Turns the monitor on or off.

Model

NP447A



Technical Specifications

Panel Type 19-in (48.14-cm) Wide-Aspect Active Matrix TFT (thin film transistor)

Viewable Image Area

(diagonal)

19 in (48.14 cm) wide (WXGA+); diagonally measured

Screen Opening (W x H)

Panel Type TN
Aspect Ratio 16:10

Viewing Angle (typical) Up to 160° horizontal/160° vertical (10:1 minimum contrast ratio)

16.1 x 10.0 in (40.82 x 25.52 cm)

Brightness (typical)* 250 nits (cd/m²)

Contrast Ratio (typical)* 1000:1

Response Time (typical)* = 5 ms (on/off)

Pixel Pitch .2835 mm

Backlight Lamp Life 50 K hours

(to half brightness)

Color Gamut 72%

*All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

On Screen Display (OSD) Controls

Buttons or Switches Auto adjust/OSD down, OSD UP, OSD menu select, power

Languages English, French, German, Spanish, Italian, Dutch, and Japanese, S. Chinese,

Portuguese

User Controls Brightness, contrast, positioning, color temperature (6500k, 9300k, custom),

individual color control, serial number, display, clock, clock phase, monitor

management, factory reset, zoom

Signal Interface/ Performance Horizontal Frequency 24 to 83 kHz Vertical Frequency 50 to 76 Hz

Native Resolution 1440 x 900 @ 60 Hz

Preset VESA Graphic 1280 x 1024 @ 60 Hz and 75 Hz

Modes (non-interlaced) 1280 x 960 @ 60 Hz

1024 x 768 @ 60 Hz and 75 Hz 800 x 600 @ 60 Hz and 75 Hz 640 x 480 @ 60 Hz and 75 Hz

CVT Mode 1152 x 720 @ 60 Hz

1280 x 768 @ 60 Hz

Text Mode 720 x 400 @ 70 Hz

Mac Mode 1152 x 870 @ 75 Hz and 832 x 624 @ 75 Hz

Sun Mode 1152 x 900 @ 66 Hz Maximum Pixel Clock 140 MHz (analog input)

Speed

User Programmable Yes, 15

Modes

Anti-Glare Yes Anti-Static No



Technical Specifications

Default Color 6500 K

Temperature

Video/Other Inputs Plug and Play Yes

Self Powered USB 2.0

Hub

Input Signal **VGA**

Input Impedance 75 ohms $\pm 10\%$

Sync Input TTL separate synch or Composite Sync

No

VGA Cable 15 pin D-sub VGA VGA Cable Length 5.9 ft (1.8 m)

Auto-Sensing, 90 to 265 VAC Power Input Power

> 45 to 63 Hz Frequency Typical Power 22.8 watts

Consumption

29.0 watts Maximum

Power Saving 2 watts standby; 1 watt off

Power Cable Length 6.2 ft (1.9 m)

Mechanical Dimensions (H x W x D) Unpacked w/stand 18.9 x 17.6 x 10.3 in (47.9 x 44.6 x 26.1 cm)

> 11.9 x 17.6 x 2.3 in (30.1 x 44.6 x 5.9 cm) Unpacked w/o stand

(head only)

Packaged 22.20 x 16.60 x 13.6 in (56.2 x 42.1 x 34.4 cm)

Weight Unpacked 15.2 lb (6.9 kg)

8.8 lb (4.0 kg) Head only **Packaged** 20.9 lb (9.5 kg)

Tilt Range -3 to +20 degrees vertical tilt

 -180° to $+180^{\circ}$ Swivel Range

Height Adjustable Yes, range: 5.3 in (13.5 cm)

Pivot Rotation No

Detachable, ships detached Base -29° to 140° F (-34° to 60° C) Temperature - Operating

Temperature - Non-

operating

-4° to 140° F (-20° to 60° C)

Humidity - Operating 20% to 80% non-condensing Humidity - Non-operating 5% to 95%, 38.7° C max wet-bulb

Altitude - Operating +12,000 ft (3,658 m)

+40,000 ft (12,192 m) Altitude - Non-operating

Environmental Data Eco-Label Certifications

This product has received or is in the process of being certified to the and Declarations following approvals and may be labeled with one or more of these marks:

- **ENERGY STAR®**
- IT ECO declaration
- EPEAT™ Silver



Environmental

Technical Specifications

Energy Consumption (in accordance with ENERGY STAR® test method)	AC Input Voltage at 100 VAC +/- 5 VAC, 50 Hz +/- 3 Hz	AC Input Voltage at 115 VAC +/- 5 VAC, 60 Hz +/- 3 Hz	AC Input Voltage at 230 VAC +/- 5 VAC, 50 Hz +/- 3 Hz
Normal Operation	18.42W	18.36W	18.80W
Sleep	0.52W	0.55W	0.51W
Off	0.45W	0.43W	0.47W
Heat Dissipation*	AC Input Voltage at 100 VAC +/- 5 VAC, 50 Hz +/- 3 Hz	AC Input Voltage at 115 VAC +/- 5 VAC, 60 Hz +/- 3 Hz	AC Input Voltage at 230 VAC +/- 5 VAC, 50 Hz +/- 3 Hz
Normal Operation	63 BTU/hr	63 BTU/hr	64 BTU/hr
Sleep	2 BTU/hr	2 BTU/hr	2 BTU/hr
Off	1 BTU/hr	1 BTU/hr	1 BTU/hr

^{*} Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.

Additional Information

This product is in compliance with the Restrictions of Hazardous Substances (RoHS) Directive, 2002/95/EC.

This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive, 2002/96/EC.

This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986).

This product is in compliance with the IEEE 1680 (EPEAT) standard at the Silver level, see: www.epeat.net.

Plastics parts weighing over 25 grams used in the product are marked per ISO 11469 and ISO1043.

Display meets the requirement for low frequency electromagnetic fields per TCO and prEN50279 A/B/C.

This product contains 0% post-consumer recycled plastic (by wt.)

This product is 93.8% recycle-able when properly disposed of at end of life.

Packaging Materials

- External:
 - O Polypropylene 28 g
- Internal:
 - o PET 74g

RoHS Compliance

Hewlett-Packard is committed to compliance with all applicable environmental laws and regulations, including the European Union Restriction of Hazardous Substances (RoHS) Directive. HP's goal is to exceed compliance obligations by meeting the requirements of the RoHS Directive on a worldwide basis. By July 1, 2006, RoHS substances will be virtually



Technical Specifications

Material Usage

eliminated (virtually = to levels below legal limits) for all HP electronic products subject to the RoHS Directive, except where it is widely recognized that there is no technically feasible alternative (as indicated by an exemption under the EU RoHS Directive).

This product does not contain any of the following substances in excess of regulatory limits (refer to the HP General Specification for the Environment at:

www.hp.com/hpinfo/globalcitizenship/environment/supplychain/gen specifications.html

- Asbestos
- Certain Azo Colorants
- Certain Brominated Flame Retardants may not be used as flame retardants in plastics
- Cadmium
- Chlorinated Hydrocarbons
- Chlorinated Paraffins
- Formaldehyde
- Halogenated Diphenyl Methanes
- Lead carbonates and sulfates
- Lead and Lead compounds
- Mercuric Oxide Batteries
- Nickel finishes must not be used on the external surface designed to be frequently handled or carried by the user.
- Ozone Depleting Substances
- Polybrominated Biphenyls (PBBs)
- Polybrominated Biphenyl Ethers (PBBEs)
- Polybrominated Biphenyl Oxides (PBBOs)
- Polychlorinated Biphenyl (PCB)
- Polychlorinated Terphenyls (PCT)
- Polyvinyl Chloride (PVC) except for wires and cables, and certain retail packaging has been voluntarily removed from most applications.
- Radioactive Substances
- Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)

Packaging

HP follows these guidelines to decrease the environmental impact of product packaging:

- Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.
- Eliminate the use of ozone-depleting substances (ODS) in packaging materials.
- Design packaging materials for ease of disassembly.
- Maximize the use of post-consumer recycled content materials in packaging materials.
- Use readily recyclable packaging materials such as paper and corrugated materials.
- Reduce size and weight of packages to improve transportation fuel efficiency.
- Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.

End-of-life Management

Hewlett-Packard offers end-of-life HP product return and recycling programs



Technical Specifications

and Recycling in many geographic areas. To recycle your product, please go to:

www.hp.com/recycle or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible

manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/recyclers. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP

OEM customers who integrate and re-sell HP equipment.

Hewlett-Packard Corporate Environmental Information

For more information about HP's commitment to the environment:

Global Citizenship Report

www.hp.com/hpinfo/globalcitizenship/gcreport/index.html

Eco-label certifications

www.hp.com/hpinfo/globalcitizenship/environmentproductdesign/

ecolabels.html

ISO 14001 certificates:

www.hp.com/hpinfo/globalcitizenship/environment/operations/

envmanagement.html

Options HP LCD Speaker Bar—Part number:

NQ576AA

Powered directly by the connected PC, the Speaker Bar seamlessly attaches to the monitor's lower bezel to bring full audio support to select HP LCD monitors. Features include dual speakers with full sound range and dual external headphone jacks. Sold separately. For more information, refer to the

product's QuickSpecs.

HP USB Graphics Adapter-Part number

NL571AA

Enables connection of up to six simultaneous displays to help you boost productivity and multi-task across several open applications. Use one Adapter to bridge between a notebook or desktop PC and second monitor or use multiple Adapters to connect several displays to each other.

HP Business PC Security Lock Kit—Part number: PV606AA

Attaches to the rear of the PC with a six-foot steel cable that can be used to secure a PC or peripherals such as mice, keyboards, monitors or USB security devices to protect them against unauthorized removal by physically connecting the system to an anchor point.

Accessories Included

VGA cable -- connects the graphic card's VGA connector to the monitor's

VGA input

Software

HP Display Assistant is a software utility that allows monitor adjustment and color calibration using the Display Data Channel Command Interface

(DDC/CI) protocol of the connected PC.

HP Display LiteSaver allows you to schedule Sleep mode at preset times to help protect the monitor against image retention, drastically lower power consumption and energy costs, and extend the lifespan of the monitor.

User Guide Languages

English, B. Portuguese, French, LA Spanish, Korean, S. Chinese, T. Chinese, Bahasa, Japanese, Danish, Finnish, German, Norwegian, Spanish, Swedish,

Greek, Polish, Russian, Slovenian, Turkish

Warranty Languages

English, Canadian French, LA Spanish, Brazilian Portuguese, Danish, German, Castilian Spanish, French, Italian, Dutch, Norwegian, Finnish,

Swedish, Bahasa Indonesian, Korean, T. Chinese, S. Chinese

Color Black

VESA External Mounting Yes, standard 4 hole pattern, 100 mm



Other

Technical Specifications

Kensington Lock-Ready Yes

Certification and Compliance

TCO 5.0 Displays, ISO 9241-307, CISPR Requirements, VCCI Approvals, KC and KCC (Korean) Requirements, CSA 60950-1, UL 60950-1, EN55022 Class B, CNS 13438 Class B, IEC 60950-1, China Energy Label (CEL), China MEPS, Korea MEPS (pending, Energy Boy), SmartWay - NA only - Energy logistics, EUP Lot 6 Tier 1 AS/NZS 3548 Class B Approval, "GS" Mark, TUV Approvals, GEEA, CE Marking, FCC Part 15 class B Approval, ENERGY STAR® qualified, EN55024 Class B, EN60950 - 1, CUL, CCIB, CCEE, IT ECO (EDS), EPEAT™ Silver

Compatibility

Compatible with platforms using the VESA standard video modes. Recommended for use with HP products.

Service and Warranty

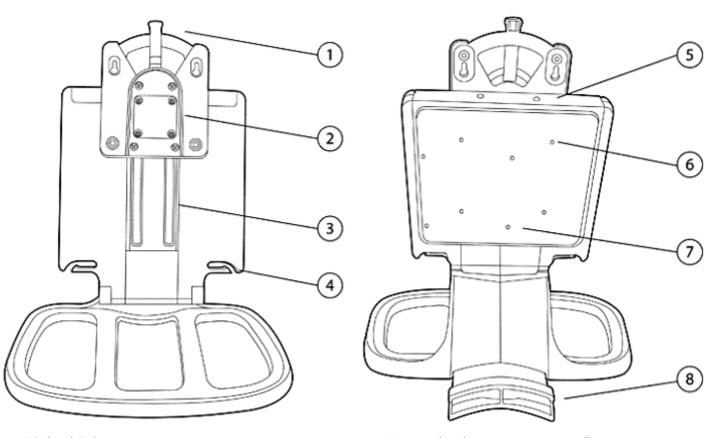
Three years parts, labor, and on-site service. 24-hour, 90-day, toll-free technical support. Replacement options may include second business day on-site service, or next business day direct replacement, at HP's sole discretion.* With direct replacement, HP will ship a replacement display product directly to you. Using the prepaid shipping labels provided, return your failed display to HP in the same packaging as the replacement. Certain restrictions and exclusions apply. For details see your product warranty or contact HP Customer Support.

* HP Care Pack Services extend service contracts beyond the standard warranties. Service starts from date of hardware purchase. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at www.hp.com/go/lookuptool. Additional HP Care Pack Services information by product is available at www.hp.com/hps/carepack. Service levels and response times for HP Care Packs may vary depending on your geographic location.



Overview - HP Integrated Work Center Stand (included with LE1901wi)

HP Integrated Work Center Stand (included with LE1901wi)



- 1. HP Quick Release security screw
- 2. Integrated HP Quick Release
- 3. Height-adjustable monitor mount
- 4. Integrated cable management slots

- 5. Mounting bracket security screw installation points
- **6.** PC and thin client mounting bracket (unique four-hole pattern for thin clients
- 7. PC and thin client mounting bracket (unique four-hole pattern for PCs
- 8. Power supply support and rear cable management loops

Technical Specifications - HP Integrated Work Center Stand (included with LE1901wi)

Mechanical Tilt range -3 to +20 degrees vertical tilt

Swivel range -180° to $+180^{\circ}$

Height adjustable Yes, range: 5.3 in (13.5 cm)

Pivot rotation No

Dimensions (Unpackaged) Cable management slot 16.5 x 14.5 x 10.25 in (41.91 x 36.83 x 26.06

cm

Cable management slot 16.5 x 14.5 x 12.25 in (41.91 x 36.83 x 31.12

out: cm)

Weight Unpackaged 6.12 lbs (2.78 kg)

Other Accessories included Exclusive Integrated Work Center VGA video cable, HP dc7800 Ultra-slim

Desktop cable cover (rear port cover), PC mounting bracket, HP Quick

Release, documentation kit, and User CD

User guide languages English, French, German, Spanish, Italian, Dutch, Brazilian Portuguese,

Danish, Finnish, Greek, Japanese, Korean, Latin American Spanish, Norwegian, Polish, Russian, Slovenian, Turkish, Swedish, Traditional

Chinese, Simplified Chinese

Warranty languages English, German, French, Italian, Spanish and Japanese

Color Carbonite

VESA external mounting Yes (Standard 4 hole pattern, two separate 100 mm patterns on the

mounting bracket)

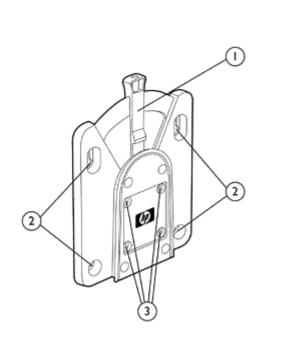
Option kit contents Integrated Work Center Stand and PC mounting bracket, Integrated Work

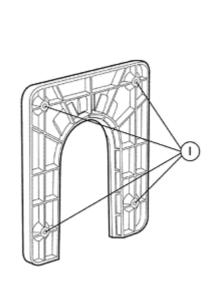
Center VGA video cable, HP Compaq dc7800 Ultra-slim Desktop cable cover (rear cover), Quick Release bracket (to attach to back of monitor)

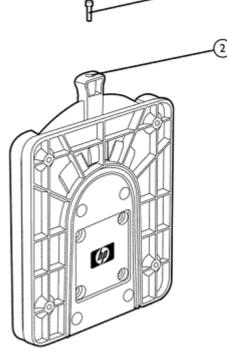
Supported weight capacity The Integrated Work Center Stand has been designed to support the weight of a 17-, 19-, or 19-inch wide format monitor only.

Overview - HP LCD Monitor Quick Release (included in IWC stand)

HP LCD Monitor Quick Release (included in IWC stand)







- Release/locking
- Four 100 mm VESA mount screw 2.
- Mounting holes for attachment to back of monitor stands
- Four 100 mm VESA mount screw holes 1. Locking pin screw
 - - 2. Locking pin hole on release/locking arm

Technical Specifications - HP LCD Monitor Quick Release

Mechanical Dimensions (H x W x D) Packaged: $7.8 \times 6.25 \times 1.5$ in (19.8 x 15.9 x 3.8 cm)

Unpackaged: 6.3 x 5.2 x 0.65 in (16 x 13.2 x 1.65 cm)

Weight Packaged: 1.1 lb (0.49 kg)

Unpackaged: 0.82 lb (0.37 kg)

Additional components

• Eight 10 mm mounting screws (for attachment to VESA compliant monitor mounts)

• Eight 15.5 mm mounting screws (for attachment to HP Compaq t5000 Thin Client products)

• Four 20 mm mounting screws (for attachment to back of select HP flat panel monitor stands)

• One Quick Release "locking" screw

Color Carbonite

NOTE: No HP monitors allow positioning of a thin client product between a monitor screen and its stand.

NOTE: The Quick Release device is not to be used between a monitor screen and its stand unless provided that way from the

factory.

NOTE: Under no circumstances is the Quick Release device intended to be used in an orientation where the Release/Lock lever is oriented downward.

Supported weight capacity

The HP LCD Monitor Quick Release has been designed to support a maximum of up to 24 lbs (10.9 kg) depending upon the mounting configuration used. Please note this is a total weight limit for all devices mounted, i.e. the combined weight of the monitor and a second device such as an HP Thin Client cannot exceed 24 pounds. Because mounting surfaces vary widely and the final mounting method and configuration may vary, mounting fasteners are not supplied (other than the VESA-compliant screws). HP recommends that you consult with a qualified engineering, architectural or construction professional to determine the appropriate type and quantity of mounting fasteners required for your application and to ensure that your mounting solution is properly installed to support applied loads.

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